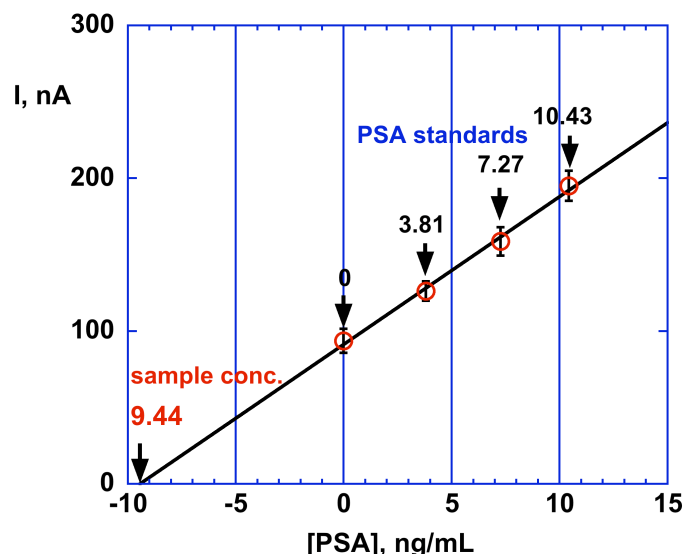


# Carbon Nanotube Amplification Strategies for Highly Sensitive Immunosensing of Cancer Biomarkers

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## Supporting Information



**Figure S1.** Example of data for mediated determination of PSA in human serum by standard addition in which SWNT/anti-PSA immunosensors were incubated with PSA in 10  $\mu\text{L}$  serum for 1.25 hours followed by 10  $\mu\text{L}$  4  $\text{pmol mL}^{-1}$  anti-PSA-HRP in 2% BSA and 0.05% Tween-20 for 1.25 hrs. Points represent PSA standard additions to the human serum samples in which 1.0, 2.0 and 3.0  $\mu\text{L}$  of 80  $\text{ng mL}^{-1}$  PSA standard were added to 20  $\mu\text{L}$  of the human serum sample to increase the concentration in  $\text{ng mL}^{-1}$  as labeled on the curve. Extrapolated value

in red is PSA found in  $\text{ng mL}^{-1}$ , compared to a value of 9.20  $\text{ng mL}^{-1}$  found by ELISA.

**Table S1.** Comparison of PSA determinations on human serum samples by SWNT immunosensors and ELISA

Human Serum Sample	[PSA] ( $\text{ng mL}^{-1}$ ) ELISA	[PSA] ( $\text{ng mL}^{-1}$ ) Immunosensor, direct calibration	[PSA] ( $\text{ng mL}^{-1}$ ) Immunosensor, standard addition
1	$0.40 \pm 0.02$	$0.38 \pm 0.07$	$0.43 \pm 0.05$
2	$6.40 \pm 0.32$	$6.07 \pm 0.30$	$6.21 \pm 0.41$
3	$9.20 \pm 0.46$	$7.36 \pm 0.75$	$9.44 \pm 0.81$
4	$21.6 \pm 1.1$	$21.5 \pm 1.3$	$22.4 \pm 1.1$
5	$59.8 \pm 3.0$	$56.1 \pm 4.9$	$58.4 \pm 5.7$